Seminar: Emerging and Re-emerging Infectious Diseases
BIO 470.001
Fall 2019

Instructor: Dr. Stephen Wagner
Department: Biology
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Office: Miller Science 223
Office Hours: M, W 8:30-9:30; R 11:00 – 12:00; T 1:00-3:00 pm; or by appointment.
Class meeting time and place: 3:30-5:00 T, STEM Bldg. 201
Text and Materials: Ten primary research articles associated with the topic of the student’s choosing.

Course Description:
Student participation in general and specific topics in biology.

Number of Credit Hours: 1

Course Prerequisites and Co-requisites: 20 semester hours of biology; no co-requisite.

Program Learning Outcomes:
Program Learning Outcome #1: The student will demonstrate a good knowledge base in biological concepts and be able to integrate knowledge with critical thinking skills to become problem solvers. Knowledge base will include: levels of complexity (molecular/cellular through population/communities/ecosystems), biological principles and processes.

Program Learning Outcome #2: The student will clearly communicate scientific information; provide clear structure and transitions; demonstrate scientific tone, language, and form.

Program Learning Outcome #5: The student will demonstrate preparation for future career and educational goals utilizing the knowledge and training during their academic program.

General Education Core Curriculum Objectives/Outcomes:
This course is not included in the general education core curriculum.

Student Learning Outcomes:
Students who complete Seminar in Biology will be able to:
1. Describe the importance of emerging and re-emerging infectious diseases and their effect on humans using specific examples (PLO 1).
2. Evaluate primary literature (PLO 1, 5).
3. Effectively communicate scientific information in oral and written form. (PLO 2, 5).

Course Requirements:
BIO 470 is designed to teach students to research, prepare and present a seminar on a specific topic. This section will investigate the emerging and re-emerging infectious diseases should address three topic areas:
   1. General characteristics of the disease – signs and symptoms, the causative agent, its pathogenesis and virulence factors
   2. Impact of the disease
   3. Evidence regarding its inclusion as an emerging/re-emerging disease
Examples of suitable diseases where research articles can be found are given below. If you choose a topic on your own it must be cleared with the instructor. Do some library work before settling on a topic, or you might not be able to obtain information on all topic areas. Here are some of the hurricanes that you may want to explore (you will need to choose a specific hurricane):

- Candida auris
- Crimean Congo
- Ebola
- SARS
- Zika Virus
- MRSA
- Lone Star Tick
- H7N2 Influenza
- Typhus
- Whopping Cough
- MDR Tuberculosis
- MERS

It will be necessary to make good use of the library in researching your topic. A list of searchable databases can be found at [http://libguides.sfasu.edu/az.php#/?_k=yspvyg](http://libguides.sfasu.edu/az.php#/?_k=yspvyg). Academic Search Complete, Biological and Agricultural Index, Google Scholar, and Medline are examples of databases that could contain articles on your chosen fungus. Some of the references you will need will have to be obtained through Interlibrary Loan; you may access this service at [https://sfasu-illiad-oclc-org.steenproxy.sfasu.edu/illiad/illiad.dll](https://sfasu-illiad-oclc-org.steenproxy.sfasu.edu/illiad/illiad.dll).

Information from a minimum of 10 journal articles must be included in each presentation. Magazines, books and web sites can also be used, but cannot be counted towards the 10 required references. A literature review and annotated of all references used in your presentation must be turned in to the instructor on the day of the seminar. This review/bibliography will be evaluated using the Dept. of Biology Written Literature Assessment rubric with guidelines for earning full credit on your annotated bibliography entries.

Your seminar will be evaluated using Dept. of Biology Oral Presentation Skills rubric. The presentation should last 22 to 25 minutes. Two points from the final seminar score will be subtracted for each minute under 22 or each minute over 25. Ten points from your final seminar score will be deducted for video clip(s) exceeding 30 sec. in length. It is important to practice your talk prior to the seminar so that you fall within the required time limit.

Course participation will be assessed using presentation summaries. Evaluations will be completed during each seminar presentation. No credit will be awarded for those not attending the seminar.

Each student is required to take the Major Field Test in Biology at Testing Services (Rusk 328). Please sign up to take this exam as soon as the registration process begins and follow through with your appointment. Students failing to take the test will receive a withheld grade (WH) for the course. More information will be given about this test during future class meetings.

Participation in the on-line student evaluations for BIO 470 is a mandatory course requirement. Failure to participate will result in a 1% reduction in your course grade.
Course Calendar:

Date                        Activity
August 27                   Discuss course policies and requirements.
Sept. 3                      Seminar Requirements; Dr. Wagner presents demo seminar.
Sept. 10                     Set up seminar schedule; Discuss conducting a literature search and literature review requirements.
Sept 10-Oct. 8              Time for seminar research. Deadline for final topic selection is Sept 25
Oct. 1                       Class meeting to review seminar schedule with topics.

Seminar Times Available:

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<tr>
<th>Oct. 15a</th>
<th>Oct. 15b</th>
<th>Oct. 22</th>
<th>Oct. 29a</th>
<th>Oct. 2b</th>
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<tr>
<td>Nov. 5a</td>
<td>Nov. 5b</td>
<td>Nov. 12</td>
<td>Nov. 19a</td>
<td>Nov. 19b</td>
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Grading Policy:
Your course average will be based on the points you earn out of 200 possible as follows:

- **Presentation**: 100 pts.
- **Literature Review/Bibliography**: 50 pts.
- **Presentation summaries**: 50 pts.

With a total of 200 points available, course grades will be assigned as follows:

- 90+% of total points = A, 80 - 89% = B, 70 - 79% = C, 60 - 69% = D, Below 60% = F

There are no extra credit assignments in this course.

Attendance Policy:
Attendance is a factor in determining the course grade. If you are absent, you forfeit the points associated with the presentation summaries for that session. After the schedule is established, only students with an excused absence will be allowed to present their seminar at an alternative time. Excused absences will be granted for: students participating in university sponsored events, serious illness, or a family emergency. A list of students to be absent from campus to attend various events is published and distributed to the faculty. Otherwise, you will need to bring written confirmation of illness or emergency from a doctor or family member to be granted an excused absence. Students with an unexcused absence will receive a 0 for their presentation.

Academic Integrity (A-9.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were
one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

Students with Disabilities
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Acceptable Student Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.